

## ASSIGNMENT

ASSIGNOR: MINNESOTA MINING AND MANUFACTURING COMPANY  
 of: PO Box 33427  
 St. Paul, Minnesota 55133-3427  
 United States of America

a corporation organized and existing under the laws of the State of Delaware, United States of America does hereby claim and declare that it is the owner of all right, title and interest in and to the following Patent Application(s) or letters Patents(s) and other rights and powers obtainable or exercisable in respect thereof as numbered in United States Patent(s) and /or Patent Application(s):

Patent Application or Patent Number  
 09/520,032

Filing Date or Issue Date  
 March 6, 2000

Minnesota Mining and Manufacturing Company does hereby, for good and valuable consideration, effective as of April 1, 1999 received, sell, assign and transfer unto:

ASSIGNEE: 3M INNOVATIVE PROPERTIES COMPANY  
 of: PO Box 33427  
 St. Paul, Minnesota 55133-3427  
 United States of America

a corporation organized and existing under the laws of the State of Delaware, United States of America, its entire right, title and interest in and to the said Patent Application(s) or Letters Patent(s) including any division, continuation (in whole or in part) reissue or reexamination thereof, and in and to any countries foreign thereto, and consent to the recordal of this Assignment.

## ASSIGNOR

Subscribed and Sworn:

At St. Paul, Minnesota 55133-3427  
 this 23<sup>rd</sup> day of August, 2001

MINNESOTA MINING AND  
 MANUFACTURING COMPANY

By: Douglas B. Little  
 Name: Douglas B. Little  
 Its: Assistant Chief Intellectual  
 Property Counsel

## ASSIGNEE

Accepted:

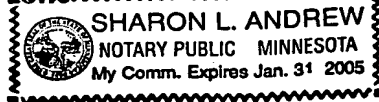
At St. Paul, Minnesota 55133-3427  
 this 23<sup>rd</sup> day of Aug, 2001

3M INNOVATIVE PROPERTIES COMPANY

By: Gary L. Griswold  
 Name: Gary L. Griswold  
 Its: President and Chief Intellectual Property Counsel

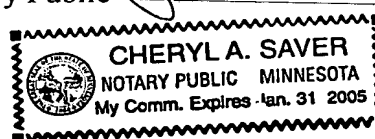
Subscribed and sworn to before me this  
23<sup>rd</sup> day of August, 2001

Sharon L. Andrew  
 Notary Public



Subscribed and sworn to before me this  
23<sup>rd</sup> day of Aug, 2001

Cheryl A. Saver  
 Notary Public



ASSIGNMENT

Whereas I, Timothy L. Hoopman, with residence and citizenship as indicated below; have made an invention in

**ABRASIVE ARTICLE, METHOD OF MANUFACTURING SAME, METHOD  
OF USING SAME FOR FINISHING, AND A PRODUCTION TOOL**

and have today executed an application for Letters Patent of the United States of America based thereon;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, I have agreed to assign and transfer and do hereby assign and transfer unto the MINNESOTA MINING AND MANUFACTURING COMPANY (sometimes designated as the Minnesota Mining & Manufacturing Company), a corporation of Delaware, having its principal office at Saint Paul, Minnesota, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in the said invention made by me or made jointly with others (provided any such improvement is made during my employment by the said Company or within one year thereafter), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon the said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by me had this assignment and transfer not been made,

I do further agree for myself and for my heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as I lawfully may, that may be deemed necessary by the said Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

And I do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to the said Minnesota Mining and Manufacturing Company, as the assignee of the entire right, title, and interest therein.

In witness whereof, I have hereunto signed my name on the day and year set forth below.

Timothy L. Hoopman  
Timothy L. Hoopman

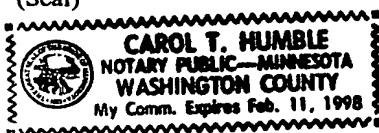
Residence: City of River Falls, County of St. Croix,  
State of Wisconsin

Citizenship: United States of America

STATE OF MINNESOTA }  
COUNTY OF RAMSEY } ss.

On this 13 day of September 1993, before me personally appeared the above-named Timothy L. Hoopman, personally known by me, and known by me to be the person described in and who executed the foregoing instrument, and who acknowledged that he executed the same as his free act and deed, on the day and year aforesaid.

(Seal)



Carol T. Humble

Notary Public

ASSIGNMENT

Whereas I, Nelson D. Sewall, with residence and citizenship as indicated below, with Timothy L. Hoopman; have made an invention in

**ABRASIVE ARTICLE, METHOD OF MANUFACTURING SAME, METHOD  
OF USING SAME FOR FINISHING, AND A PRODUCTION TOOL**

and have today executed an application for Letters Patent of the United States of America based thereon;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, I have agreed to assign and transfer and do hereby assign and transfer unto the MINNESOTA MINING AND MANUFACTURING COMPANY (sometimes designated as the Minnesota Mining & Manufacturing Company), a corporation of Delaware, having its principal office at Saint Paul, Minnesota, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in the said invention made by me or made jointly with others (provided any such improvement is made during my employment by the said Company or within one year thereafter), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon the said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by me had this assignment and transfer not been made,

I do further agree for myself and for my heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as I lawfully may, that may be deemed necessary by the said Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

And I do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to the said Minnesota Mining and Manufacturing Company, as the assignee of the entire right, title, and interest therein.

In witness whereof, I have hereunto signed my name on the day and year set forth below.

*Nelson D. Sewall*

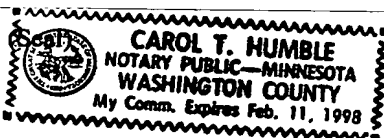
Nelson D. Sewall

Residence: City of Brooklyn Park, County of Hennepin, State of Minnesota

Citizenship: United States of America

STATE OF MINNESOTA }  
COUNTY OF RAMSEY } ss.

On this 19th day of January 1994, before me personally appeared the above-named Nelson D. Sewall, personally known by me, and known by me to be the person described in and who executed the foregoing instrument, and who acknowledged that he executed the same as his free act and deed, on the day and year aforesaid.



*Carol T. Humble*

Notary Public